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Amendments to Claims

1. (Cancelled).
2. (Currently Amended). A composition comprising an aqueous dispersion of an electrically conductive organic polymer doped with a polymeric acid and a plurality of nanoparticles composition according to Claim 1, wherein said electrically conductive organic polymer is selected from combinations of any two or more of polyanilines, polythiophenes and polypyrroles, and combinations thereof.
3. (Original). A composition according to Claim 4 2, wherein the pH is adjusted to between 1 and 8.
4. (Original). A composition according to Claim 4 2, wherein said nanoparticles are inorganic nanoparticles.
5. (Currently Amended). A composition according to Claim 4, wherein said inorganic nanoparticles are selected from silica, alumina, semiconductive inorganic oxide particles, insulating inorganic oxide particles, piezoelectric oxide nano-particles, pyroelectric oxide nano-particles, ferroelectric oxide nano-particles, photoconductive oxide nanoparticles, electrically conductive metal oxides, electrically conductive metal nanowires, and electrically conductive metal nanoparticles.,
6. (Currently Amended). A composition according to Claim 2 4, wherein said nanoparticles are organic nanoparticles.
7. (Original). A composition according to Claim 6, wherein said organic nanoparticles are selected from colloid-forming polymeric acids, carbon nanotubes, carbon nano-particles, graphitized carbon nano-particles, graphitized carbon nano-fibers, piezoelectric polymers, pyroelectric polymers, ferroelectric polymers, and photoconductive polymers.
8. (Original). A composition according to Claim 7, wherein said colloid-forming polymeric acid is a perfluoroethylene sulfonic acid.
9. (Currently Amended). A composition according to Claim 2 4, wherein said nanoparticles have a particle size less than about 500 nm.
10. (Original). A composition according to Claim 2 4, wherein said nanoparticles have a particle size less than about 250 nm.
11. (Original). A composition according to Claim 2 4, wherein said nanoparticles have a particle size less than about 50 nm.
12. (Original). A composition according to Claim 5, wherein the weight ratio of silica:electrically conductive polymer is about 4:1.

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13. (Original). A composition according to Claim 5, wherein the nanoparticle is an electrically semiconductive oxide, and a weight ratio of electrically semiconductive oxide to electrically conductive polymer is about 1.5 to 1.

14. (Currently Amended). A buffer layer comprising a composition comprising an aqueous dispersion of an electrically conductive organic polymer doped with a polymeric acid and a plurality of nanoparticles composition according to Claim 1, wherein said electrically conductive organic polymer is selected from combinations of two or more of polyanilines, polythiophenes and polypyrroles, comprising an electrically conductive polymer and a plurality of nanoparticles.

15. (Cancelled).

16. (Currently Amended.) A buffer layer according to Claim 14-15, wherein said electrically conductive polymer is a combination of selected from PAni/PAAMPSA, PAni/PSSA, PEDT/PSSA, PEDT/PAAMPSA, PPy/PSSA, and PPy/PAAMPSA, respectively.

17. (Original). A buffer layer according to Claim 14, wherein said nanoparticles are inorganic nanoparticles.

18. (Original). A buffer layer according to Claim 14, wherein said inorganic nanoparticles are selected from silica, alumina, and electrically semiconductive metal oxides.

19. (Original). A buffer layer according to Claim 14, wherein said nanoparticles are organic nanoparticles.

20. (Currently Amended). A buffer layer according to Claim 14, wherein said organic nanoparticles are selected from colloid-forming polymeric sulfonic acids, colloid-forming polymeric acrylatic acids, colloid-forming polymeric phosphonics acids, and colloid-forming polymeric phosphoric acids.-

21. (Original). A buffer layer according to claim 14 wherein said organic nano-particles comprise perfluoroethylenesulfonic acid.

22. (Currently Amended). A buffer layer accordingly to claim 14 made from an aqueous dispersion comprising poly(3,4-thylenedioxothiophene) and polymeric perfluoroethylenesulfonic acid, wherein the aqueous dispersion has a pH greater than 2 and an equivalent ratio of polymeric perfluoroethylenesulfonic acid to poly(3,4-thylenedioxothiophene) greater than 0.1.

23. A buffer layer according to Claim 14, wherein said layer has a conductivity of less than about  $1 \times 10^{-3}$  S/cm.

24. A buffer layer according to Claim 14, wherein said layer has a conductivity of less than about  $1 \times 10^{-5}$  S/cm.

25. An organic electronic device comprising a buffer layer comprising a composition comprising an aqueous dispersion of an electrically conductive organic

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polymer doped with a polymeric acid and a plurality of nanoparticles according to Claim 1, wherein said electrically conductive organic polymer is selected from combinations of two or more of polyanilines, polythiophenes and polypyrroles. an electrically conductive polymer and a plurality of nanoparticles.

26. (Cancelled).

27. (Currently Amended). A device according to Claim 25 26, wherein said electrically conductive polymer is selected from a combination of PAni/PAAMPSA, PAni/PSSA, PEDT/PAAMPSA, PEDT/PSS, PPy/PSSA, and PPy/PAAMPSA, respectively.

28. A device according to Claim 25, wherein said nanoparticles are inorganic nanoparticles.

29. A device according to Claim 25, wherein said inorganic nanoparticles are selected from silica, alumina, or electrically semiconductive metal oxides.

30. A device according to Claim 25, wherein said nanoparticles are organic nanoparticles.

31. A device according to Claim 25, wherein said organic nanoparticles are selected from colloid-forming polymeric acids.

32. A device according to Claim 25, wherein said buffer layer has a conductivity less than about  $1 \times 10^{-3}$  S/cm.

33. A thin film field effect transistor electrode, comprising a composition comprising an aqueous dispersion of an electrically conductive organic polymer doped with a polymeric acid and a plurality of nanoparticles composition, wherein said electrically conductive organic polymer is selected from combinations of two or more of polyanilines, polythiophenes and polypyrroles. an electrically conductive polymer and a plurality of nanoparticles.

34. (Cancelled.) A thin film field effect transistor electrode according to Claim 33, wherein said electrically conductive polymer is selected from polyanilines, polythiophenes, polypyrroles, and combinations thereof.

35. A thin film field effect transistor electrode according to Claim 33, wherein said nanoparticles are inorganic nanoparticles.

36. A thin film field effect transistor electrode according to Claim 33, wherein said inorganic particles are metallic nanoparticles.

37. A thin film field effect transistor electrode according to Claim 33, wherein said metallic nanoparticles are molybdenum nanoparticles.

38. A thin film field effect transistor electrode according to Claim 33, wherein said nanoparticles are organic nanoparticles.

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39. A thin film field effect transistor electrode according to Claim 33, wherein said organic nanoparticles are selected from carbon nanotubes, graphitized carbon particles, and graphitized carbon nano-fibers.

40. A thin film field effect transistor comprising an electrode according to Claim 33.

41. A thin film field effect transistor according to Claim 40, wherein said thin film field effect transistor has a conductivity greater than about 10 S/cm.

42. (Cancelled).

43. An electronic device according to Claim 25, wherein the device is selected from photoconductive cells, photoresistors, photoswitches, phototransistors, phototubes, IR detectors, photovoltaic device, solar cells coating materials for memory storage devices, field effect resistance devices, anti-static films, biosensors, electrochromic devices, solid electrolyte capacitors, energy storage devices, and electromagnetic shielding.